

Nemaha County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/12/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 23 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Nemaha County economy.¹

These 23 sectors have a total direct output of approximately **\$1.44 billion** and support **2,135 jobs** in Nemaha County. Running the model for all 23 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Nemaha County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	2134.9	25.77%	\$280,984,378	42.05%	\$1,439,949,328	215.49%
Indirect Effect	943.3	11.39%	\$74,633,198	11.17%	\$146,746,079	21.96%
Induced Effect	539.8	6.52%	\$35,195,742	5.27%	\$68,087,222	10.19%
Total Effect	3618.0	43.68%	\$390,813,318	58.48%	\$1,654,782,629	247.63%

As shown in the above table, agriculture, food, and food processing sectors support **3,618 jobs**, or **43.68%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$1.65 billion**, roughly **247.63% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 23 agriculture, food, and food processing sectors is approximately **\$390.8 million**, or **58.48% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **58.48% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the dog and cat food manufacturing sector is the top employer with **378 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Nemaha County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	378.4	\$542,136,909
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	376.3	\$56,801,348
Animal production, except cattle and poultry and eggs	323.8	\$49,565,932
Wholesale trade	245.4	\$51,522,741
Food product machinery manufacturing	244.4	\$78,739,586
Dry, condensed, and evaporated dairy product manufacturing	198.2	\$281,900,097
Truck transportation	190.5	\$34,461,725
Other animal food manufacturing	165.3	\$222,425,281
Farm machinery and equipment manufacturing	164.1	\$83,945,105
Grain farming	85.2	\$39,706,090

The dog and cat food manufacturing sector directly contributes approximately **\$542.1 million** to the Nemaha County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	378.4	\$542,136,909
Dry, condensed, and evaporated dairy product manufacturing	198.2	\$281,900,097
Other animal food manufacturing	165.3	\$222,425,281
Farm machinery and equipment manufacturing	164.1	\$83,945,105
Food product machinery manufacturing	244.4	\$78,739,586
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	376.3	\$56,801,348
Oilseed farming	41.6	\$54,111,142
Wholesale trade	245.4	\$51,522,741
Animal production, except cattle and poultry and eggs	323.8	\$49,565,932
Grain farming	85.2	\$39,706,090

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Nemaha County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	41.6	\$54,111,142.10
Grain farming	85.2	\$39,706,089.68
Vegetable and melon farming	0.0	\$9,858.58
Fruit farming	1.3	\$125,258.37
Tree nut farming	0.4	\$73,342.92
Greenhouse, nursery, and floriculture production	2.4	\$354,963.25
All other crop farming	26.0	\$2,484,728.14
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	376.3	\$56,801,348.46
Dairy cattle and milk production	47.6	\$21,011,393.57
Poultry and egg production	0.5	\$421,731.07
Animal production, except cattle and poultry and eggs	323.8	\$49,565,931.71
Commercial logging	1.0	\$46,354.05
Commercial hunting and trapping	2.1	\$42,615.34
Dog and cat food manufacturing	378.4	\$542,136,909.08
Other animal food manufacturing	165.3	\$222,425,280.67
Dry, condensed, and evaporated dairy product manufacturing	198.2	\$281,900,097.23
Meat processed from carcasses	1.8	\$904,997.25
Bread and bakery product, except frozen, manufacturing	10.6	\$1,171,121.95
Frozen cakes and other pastries manufacturing	0.7	\$99,010.77
Farm machinery and equipment manufacturing	164.1	\$83,945,104.68
Food product machinery manufacturing	244.4	\$78,739,586.46
Veterinary services	25.4	\$2,416,722.65
Landscape and horticultural services	37.8	\$1,455,740.37

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Nemaha County, the retail sector was omitted.